## **ABSTRACT**

To generate a high data transfer rate from a magnetic write head, a faster flux rise time is needed. This often brings about severe excess saturation of the head and, as a result, adjacent track erasures often occur. This problem has been overcome by dividing the bottom pole into front and rear sections with a step between them. The write gap is part of the front section while the rear section (to which the front section is attached) is closer to the top pole so excess flux generated by higher write currents can be absorbed in a direction normal to the ABS instead of being diverted to the bottom pole shoulder.